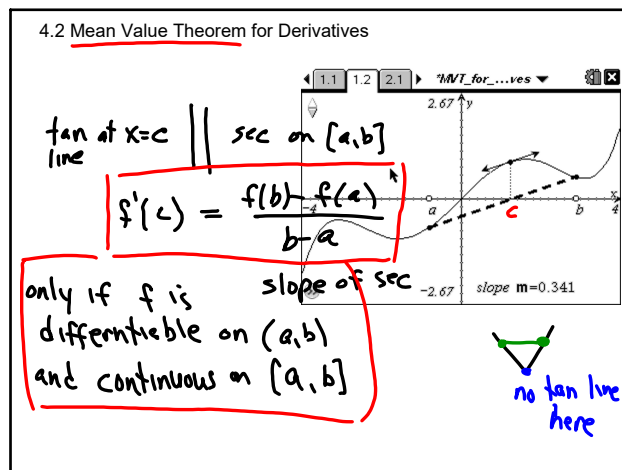
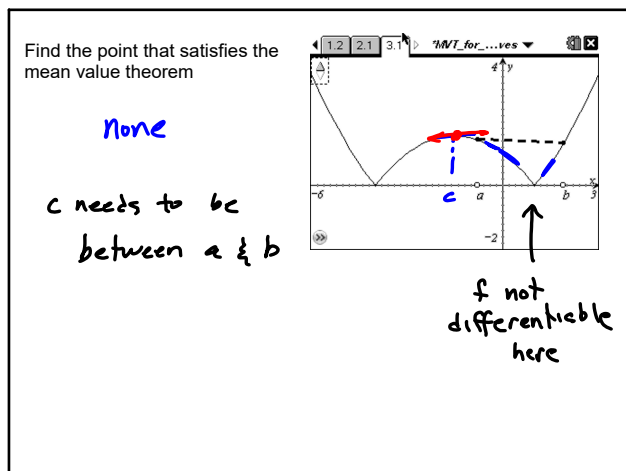


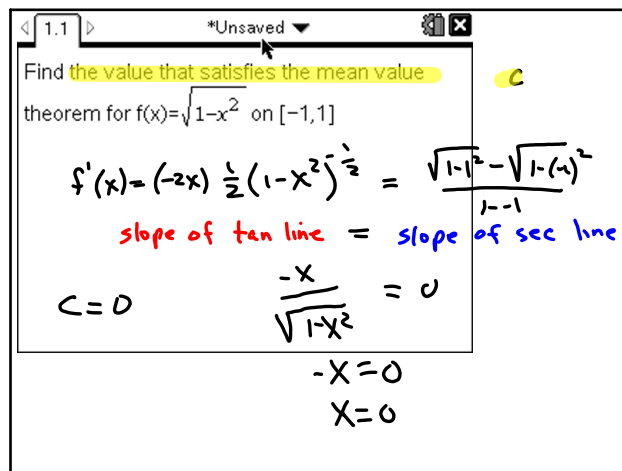
Oct 9-10:04 AM



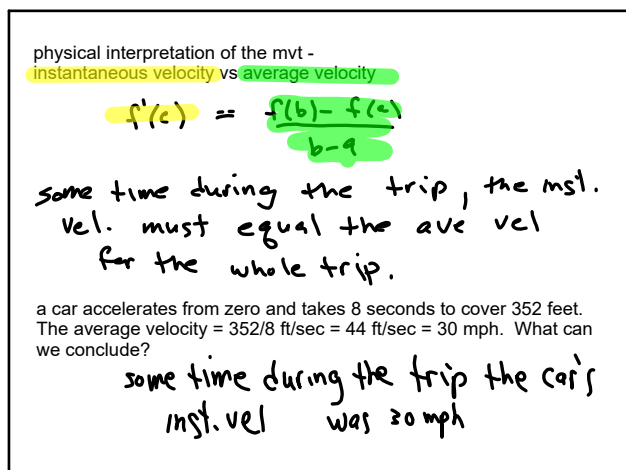
Oct 18-1:10 PM



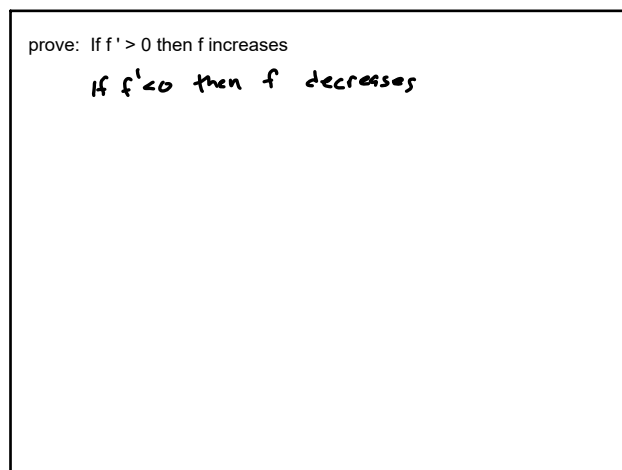
Oct 18-1:13 PM



Oct 18-1:17 PM



Oct 18-1:20 PM



Oct 18-1:31 PM

Where is $f(x) = x^3 - 4x$ increasing and where is it decreasing?

$$f(x) = x^3 - 4x$$

$$f'(x) = 3x^2 - 4 = 0$$

$$x^2 = \frac{4}{3}$$

f increases on

$$(-\infty, -\sqrt{\frac{4}{3}}) \cup (\sqrt{\frac{4}{3}}, \infty)$$

sign graph

$$x = \pm\sqrt{\frac{4}{3}}$$

f decreases on

$$(-\sqrt{\frac{4}{3}}, \sqrt{\frac{4}{3}})$$

of f' $+$ 0 $-$ 0 $+$ $+$



Oct 18-1:32 PM